

Elaston® - W80

PRODUCT DESCRIPTION

Elaston-W80 is a two-component, spray-applied, pure-polyurea, designed for use through portable spray equipment such as a Reactor E-10HP. Within seconds it forms a tough, elastomeric, protective coating that offers much faster development of strength and lower shrinkage than other polyurea products, making it ideal for use with geofabric or where movement in the substrate is expected soon after application such as when night-time temperatures drop rapidly.

INTENDED USES

- Planter boxes
- Wet areas
- Water reservoir rooftops
- Application to Geofabric for basement tanking or Earthen Bunds
- For use over geofabric
- Joints on concrete roofs
- Podiums
- Used as an underground membrane and back filled with soil, concrete, or shotcrete

FEATURES

- Cures in seconds
- Exceptional toughness and flexibility
- Contains no VOC and no catalyst
- Cures to full performance 3-4 times quicker than standard polyurea
- Remains permanently elastomeric
- Will not crack or flake
- Perfect for high movement expansion joints or over geofabric

PRODUCT DATA

Volume Solids	100%
Theoretical Coverage	1.5L / Square meter @ 1500 Microns (1.5mm) DFT
Finish	Pigmented
Colour	Various
Gloss	Semi-Gloss
Mixing Ratio	1:1 by volume
Gel Time	6 Seconds
Typical Thickness	1500 Microns Dry Film Thickness
Cleaner	Reactor Flush or Swell
Flash Point	>149 °C
VOC	0 Grams/Litre
Specific Gravity	1.06

CURE & RECOAT

Substrate Temp	Tacked	Hard Dry	Full Cure	Walk on Time Note 1	Water Immersion Time
25°C	45 sec	5 min	7 days	5 min	5 hrs

Note 1: Once Elaston-W80 gels and becomes tack free, it will remain 'cheesy' for up to 15 minutes or longer in colder weather. Care should be taken not to damage the coating during this time.

ENGINEERING DATA

Property	Method	Results
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Elongation at 24°C	ASTM D412-92	> 400 %
Abrasion Resistance	ASTM c501-84, H18 wheel @ 1,000rpm with 1,000g weight	95mg
Tensile Strength	ASTM D412-92	14.8 MPa
Tear Strength	ASTM D 624-86	60 - 65 N/mm
Hardness	ASTM D 2240-91, Shore A	80
Water Absorption	AS 3558.1	< 1 %
Water Vapour Transmission	E96-05 (B)	0.18 g / (h.m2) 4.30 g / (24h.m2)
Cathodic Disbondment with 3mm thick coating	ASTM G8-90 Method B using an impressed current	Rating D

LIMITATIONS

- Standard Aromatic based Polyurea products such as Elaston-W80 will change colour over time, with lighter colours changing more than darker colours. This does not affect the long-term physical performance of the lining. If for aesthetic reasons the colour change is not acceptable, a colour-fast topcoat such as Opalon Polyaspartic should be applied or the use of Colourtuff aliphatic polyurea can be considered.
- Elaston-W80 can only be applied using properly functioning, plural, airless spray equipment by an experienced operator
- Product requires up to 14 days to develop full physical properties and adhesion. Pull-off or other adhesion testing might not product accurate results during this period

SURFACE PREP

Concrete

The concrete should be at least 28 days old. Ensure that the moisture content of the concrete is less than 7% before applying any coatings. A moisture test as outlined in ASTM D4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" can be used to confirm the moisture content.

1. Prepare the concrete surface to a clean, dry finish
2. Ensure that any laitance or other invisible contaminants have been removed. Be especially careful with concrete surfaces that have been in contact with form ply or moulds that may contain release agents. These release agents commonly containing heavy hydrocarbon waxes or silicones that can adversely affect the adhesion of the Civilox primers
3. Fill bug holes with PU sealant or Civilox – LV100 primer mixed with Renderfill
4. Render exposed aggregate back to the original profile with a mixture of Civilox - LV100 and Renderfill
5. Remove high spots and protrusions, radius sharp edges and corners. Cove internal 90-degree angles with 45 degree, 20mm flat chamfer
6. Preparing of the concrete surface should be done in accordance with SSPC-SP13/NACE 6.
7. Smooth, shiny concrete must be roughened to a profile similar to 80 grit sandpaper or comply with CSP 2 - 5 or as documented in a coating system specification.
8. Surface preparation methods employed can be vapour abrasive blasting, dry abrasive blasting, hydro blasting, mechanical scabbling or diamond grinding. Acid etching is not an acceptable surface preparation method

Steel

1. Remove all rust, mill scale, oil and any previously applied coatings back to bare clean steel using abrasive blast. Welds should have slag and spatter fully removed
2. Blast clean to SA 2.5 - AS 1627.9 and a blast profile of 50 to 100 microns
3. For permanent immersion remove any soluble salts on the steel surfaces to a concentration less than 5 micrograms /cm²

APPLICATION

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Equipment

Proportioning pump:	GRACO Reactor E-10HP or E-XP2 or similar, heated, high-pressure, plural component
Gun:	GRACO Fusion-AP or similar, impingement mix, airless
Pressure of material at gun:	>2,000psi minimum while spraying
Temperature of material at gun:	65°C

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 3°C higher than the dew point temperature
Substrate Temperature:	The substrate temperature must be a minimum of 5°C

Mixing

Stir Part B at high speed, without entrapping air, using a Graco Twistork drum stirrer for about 10 minutes then reduce speed to slow during the spraying. For smaller containers use a mechanically powered, flat paddle stirrer

Thinning

Elaston-W80 should never be thinned. Viscosity is controlled using heat.

Clean-Up

Reactor Flush may be used for general clean-up of equipment and to flush plural pumps and hoses. To remove cured polyurea and overspray from metal parts soak in SWELL. Use separate soak containers for Part A and Part B components. The use of plastic soak containers with removable baskets and clip-on lids makes the job easier. Replace the SWELL regularly as soon as it starts turning cloudy and dirty.

NOTE: NEVER USE SWELL TO CLEAN PAINTED SURFACES, AS IT WILL STRIP THE PAINT. NEVER USE SWELL TO FLUSH PUMPS AND HOSES. DO NOT ALLOW SWELL TO COME INTO CONTACT WITH THE OUTSIDE PROTECTIVE POLYURETHANE COVER OF HOSES.

COMPATIBILITY

Primers

Civilox - LV100
Civilox - LV110
Aralox - FL150
Civilox - HB200

Topcoats

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Typical Systems

Substrate	Environment	Substrate Prep	Coat	System	DFT
Steel	General Protection	Blast SA2.5	1 st Coat 2 nd Coat	Civilox – HB200 Elaston-W80	125µ 3000µ
Concrete	Planter Box		1 st Coat 2 nd Coat 3 rd Coat	Civilox-LV110 Civilox-HB200 Elaston-W80	200µ 125µ 3000µ
Concrete	Rooftop		1 st Coat 2 nd Coat	Aralox-FL150 Elaston-W80	200µ 3000µ

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STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and in the original properly sealed containers. Protect from heat and frost. Protect contents from moisture. Do not allow water to pond on top of drums.

A shelf life of 12 months minimum is typical with unopened containers if stored at ambient conditions at 25°C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed.

PACK SIZE

400L Kits

225Kg of Elaston - W80 Part A in a 200L Container

206Kg of Elaston - W80 Part B in a 200L Container

40L Kits

22.5Kg of Elaston - W80 Part A in a 20L Container

20.0Kg of Elaston - W80 Part B in a 20L Container

CERTIFICATES

AS4020:2018 | Potable Water

NATA AS4654.1 | Waterproofing membrane for external above-ground use

NATA AS4858:2004 | Wet area membranes

HEALTH & SAFETY

Elaston-W80 is for professional use only.

This product contains isocyanates and may require the use of air feed hoods.

This product should not be used without consulting the Safety Data Sheets first.

Please observe all health and safety as well as environmental legislation that applies in your state

DISCLAIMER

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto.

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